

REMARKS

Applicants cancel claims 30-33. Claims 1-29 and 34-38 remain pending in the application. Applicants amend claims 1-3, 11-14, 20-23, 25, 26, 28, 29 and 34-38 for further clarification, and refer to page 1, lines 20-21, page 2, lines 23-25, page 14, line 19 to page 15, line 1, page 15, line 23 to page 16, line 4, page 17, line 19 to page 18, line 1, page 22, line 25 to page 23, line 28, page 24, lines 14-25, page 40, line 5 to page 41, line 6 of the specification for exemplary embodiments of and support for the claimed invention. No new matter has been added.

Applicants acknowledge with appreciation the finding that claims 8-10, 12, 14-19, 22-23, and 25-26 contain allowable subject matter. Applicants respectfully submit that the respective base claims from which these claims depend are patentable over the reference cited against them, as demonstrated below. Accordingly, Applicants respectfully request that the Examiner also allow claims 8-10, 12, 14-19, 22-23, and 25-26.

Claim 12 stands rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter of the invention.

Applicants amend claim 12 to correct the antecedent basis issue objected to by the Examiner, and respectfully request that the Examiner withdraw the § 112, ¶ 2 rejection.

Claims 30-33 were rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. Applicants cancel claims 30-33.

Claims 1-7, 11, 13, 20-21, 24, and 27-38 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,581,166 to Hirst et al. Applicants respectfully traverse the rejection.

The abstract of Hirst et al. includes the following description,

“Faults are detected through the use of a heartbeat pinging mechanism to detect faults on the network itself and by periodic port integrity checks to detect port faults. The integrity of the non-default network and port are also periodically verified to assure effective fault recovery. Upon detection of a fault, a packet routing table in the detecting computer is altered to set the detecting computer’s default network to the previously non-default network.”

Hirst et al. further describe the following on column 1, lines 11-14,

“This invention relates generally to computer networks, and more particularly, relates to detecting and recovering from faults associated with a computer network used for purposes of process control.”

Hirst et al. also describe, on column 4, lines 56-57,

“Network switches in the preferred network configuration implement the Spanning Tree Protocol (STP), ...”

Hirst et al. further describe the following at column 9, lines 54-62,

“...the NFDR 201 periodically causes pings to be sent to local ping servers in step 601, sending a ping to the local primary ping server via the primary port, and a ping to the local alternate ping server via the alternate port. If the stations does not receive a ping reply within a predetermined timeout period (step 603), it is assumed in step 605 that connectivity between the station and the particular ping server is defective.”

Hirst et al. fail to disclose, however, autonomously transferring a control packet stored in a buffer device in place of an arriving control packet to a processing unit in a specific cycle when no control packet is received for a specific period, thereby preventing the processing unit from re-configuring a communication route of a spanning tree protocol.

Instead, Hirst et al. merely describe altering a packet routing table in a computer to set the computer's default network to a previously non-default network upon detection of a fault through a heartbeat pinging mechanism.

In other words, Hirst et al. as cited and relied upon by the Examiner, fail to disclose,

“[a] control packet processing apparatus for receiving a control packet including a cost value of a communication route and used to exchange a variety of information among devices that support a spanning tree protocol, comprising:

a receiving device receiving the control packet;

a buffer device storing the received control packet; and

a control device autonomously transferring the control packet stored in the buffer device in place of an arriving control packet to a processing unit in a specific cycle when no control packet is received for a specific period, thereby preventing the processing unit from re-configuring a communication route of a spanning tree protocol,” as recited in claim 1. (Emphasis added)

Accordingly, Applicants respectfully submit that claim 1 is patentable over Hirst et al. for at least the foregoing reasons. Claims 11, 34, and 36 incorporate features that correspond to those of claim 1 cited above, and are, therefore, together with claims 13 and 20 dependent from claim 11, patentable over Hirst et al. for at least the same reasons.

Correspondingly, Hirst et al., as cited and relied upon by the Examiner, merely describe altering a packet routing table in a computer to set the computer's default network to a previously non-default network upon detection of a fault through a heartbeat pinging mechanism, and, therefore, fail to disclose,

“[a] control packet processing apparatus for receiving a first control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, comprising:

a generation device generating a second control packet indicating stoppage of transmitting the first control packet when transmission of the first control packet is stopped; and

a transmitting device transmitting the generated second control packet to prevent the re-configuration of the communication route of a spanning tree protocol when a receiving side device receives no first control packet for a specific period,” as recited in claim 2. (Emphasis added)

Accordingly, Applicants respectfully submit that claim 2 is patentable over Hirst et al. for at least the foregoing reasons. Claims 21 and 37 incorporate features that correspond to those of claim 2 cited above, and are, therefore, together with claims 24 and 27 dependent from claim 21, patentable over Hirst et al. for at least the same reasons.

And, again, Hirst et al., as cited and relied upon by the Examiner, merely describe altering a packet routing table in a computer to set the computer’s default network to a previously non-default network upon detection of a fault through a heartbeat pinging mechanism. In other words, Hirst et al., as cited and relied upon by the Examiner, fail to disclose,

“[a] control packet processing apparatus for receiving a control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, comprising:
an input device inputting an instruction to start an automatic transmission of a control packet; and
a transmitting device autonomously transmitting a control packet for a specific period at specific intervals according to the instruction from when a processing unit stops to output a control packet transmit request until the processing unit restarts to output the control packet transmit request,” as recited in claim 3. (Emphasis added)

Accordingly, Applicants respectfully submit that claim 3, together with claims 4-7 dependent therefrom, is patentable over Hirst et al. for at least the foregoing reasons. Claims 28, 29, 35 and 38 incorporate features that correspond to those of claim 3 cited above, and are, therefore, patentable over Hirst et al. for at least the same reasons.

CONCLUSION

It is believed that the present Amendment is responsive to each of the points raised by the Examiner in the Office Action. However, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to such matters.

There being no further outstanding objections or rejections, it is submitted that the present application is in condition for allowance. An early action to that effect is courteously solicited.

If there are any additional fees associated with the filing of this Response, please charge same to our Deposit Account No. 50-1290.

Respectfully submitted,

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